

Amendments In the Claims

Please amend claims 1, 4-16, 21, 24-36, 41-47, 49-52, 54, 59, and 62-74 as follows:

1. (Currently Amended) A computer-implemented method ~~for generating a configurator~~ comprising:
generating a customizable product configurator, said generating comprising
 creating a customizable product class, wherein
 the customizable product class comprises including a set of one or more attributes to define the customizable product class;
 adding a component product class to the customizable product class,
wherein
 the component product class is a subclass of the customizable product class; and
 mapping a customizable user interface (UI) to the customizable product class, wherein
 the customizable UI ~~to~~ provides an access structure to the
customizable product configurator,
elements of the customizable UI access structure correspond to
elements of the customizable product class,
~~wherein~~ the customizable product class is configured to represent a consumer product, and
 the component product class is configured to represent one or more components of the consumer product.

2. (Original) The method of claim 1 wherein the component product class includes component product subclasses.

3. (Original) The method of claim 1 wherein the component product class inherits the attributes of the customizable product class.

4. (Currently Amended) The method of claim 1 wherein said generating further comprises[[ing]]:
 adding one or more component product classes to a port; and
 adding the port to the customizable product class, wherein
 the port [[to]] allows the configurator to classify a group of component products.

5. (Currently Amended) The method of claim 4, wherein
 the port comprises includes a cardinality attribute, and
 the cardinality attribute ~~to~~ constrains the number of component products to be added by the configurator.

6. (Currently Amended) The method of claim 5, wherein
 the cardinality attribute comprises includes a minimum cardinality and a maximum cardinality,
 the minimum cardinality ~~to~~ constrains the minimum number of component products to be added by the configurator, and
 the maximum cardinality ~~to~~ constrains the maximum number of component products to be added by the configurator.

7. (Currently Amended) The method of claim 5, wherein
 the cardinality attribute comprises includes a default cardinality, and
 the default cardinality defines a quantity of the component product class added by the configurator.

8. (Currently Amended) The method of claim 1 wherein the mapping comprises: to-include
 building the customizable UI from a set of themes, groups, and controls.

9. (Currently Amended) The method of claim 8 wherein a theme of the set of themes, groups, and controls comprises one or more of ~~are~~ tabs and wizards.

10. (Currently Amended) The method of claim 8 wherein each theme in the set of themes, groups, and controls comprises includes at least one of the set of background colors, fonts, and multi-linguals.

11. (Currently Amended) The method of claim 8 wherein a group of the set of themes, groups, and controls comprises ~~the group includes~~ one or more of the controls.

12. (Currently Amended) The method of claim 8 wherein a the control of the set of themes, groups, and controls comprises ~~includes~~ one or more of a drop down box, a radio button, and a list box.

13. (Currently Amended) The method of claim 1 further comprising:
~~wherein the customizable UI is used to generate~~ generating a user interface for
the [[a]] component product class using the customizable UI.

14. (Currently Amended) The method of claim 1 wherein the customizable UI is a subclass of the customizable product class.

15. (Currently Amended) The method of claim 1 further comprising:
~~wherein the customizable UI is used to generate~~ generating a configurator
user interface with HTML, Applets, and ActiveX programming languages,
wherein
said generating uses the customizable UI.

16. (Currently Amended) The method of claim 1, wherein
the component product class comprises includes a static attribute, and
the static attribute is not associated with a parent class.

17. (Original) The method of claim 1 wherein the component product class, customizable class rules, and UI class are object oriented classes.

18. (Original) The method of claim 1 wherein the customizable product has an object oriented structure.

19. (Original) The method of claim 1 wherein the customizable product includes versioning.

20. (Original) The method of claim 1 wherein the configurator is stored in a data store.

21. (Currently Amended) A machine-readable medium that provides instructions, which when executed by a set of one or more processors, cause the set of processors to perform operations ~~for generating a configurator~~ comprising:

generating a customizable product configurator, said generating comprising

creating a customizable product class, **wherein**

the customizable product **class comprises including** a set of one or more attributes to define the customizable product **class**;

adding a component product class to the customizable product class,

wherein

the component product class is a subclass of the customizable product **class**; and

mapping a customizable UI to the customizable product class, **wherein**

the customizable UI ~~to~~ provides **an** access structure to the configurator,

elements of the customizable UI access structure correspond to

elements of the customizable product class,

~~wherein~~ the customizable product class is **configured** to represent a consumer product, and

the component product class is **configured** to represent one or more components of the consumer product.

22. (Original) The machine-readable medium of claim 21 wherein the component product class includes component product subclasses.

23. (Original) The machine-readable medium of claim 21 wherein the component product class inherits the attributes of the customizable product class.

24. (Currently Amended) The machine-readable medium of claim 21 further **provides instructions that cause the set of processors to perform operations** comprising:

adding one or more component product classes to a port; and

adding the port to the customizable product class, **wherein**

the port ~~[[to]]~~ allows the configurator to classify a group of component products.

25. (Currently Amended) The machine-readable medium of claim 24, wherein

the port **comprises** ~~includes~~ a cardinality attribute, **and**

the cardinality attribute ~~to~~ constrain the number of component products to be added by the configurator.

26. (Currently Amended) The machine-readable medium of claim 25, wherein

the cardinality attribute **comprises** ~~includes~~ a minimum cardinality and a maximum cardinality,

the minimum cardinality ~~to~~ constrain the minimum number of component products to be added by the configurator, **and**

the maximum cardinality ~~to~~ constrain the maximum number of component products to be added by the configurator.

27. (Currently Amended) The machine-readable medium of claim 25, wherein

the cardinality attribute **comprises** ~~includes~~ a default cardinality, **and**

the default cardinality defines a quantity of the component product class added by the configurator.

28. (Currently Amended) The machine-readable medium of claim 21 **further providing instructions for wherein the mapping comprising: to include** building the customizable UI from a set of themes, groups, and controls.
29. (Currently Amended) The machine-readable medium of claim 28 wherein **a theme of the set of themes, groups, and controls comprises one or more of** ~~includes~~ tabs and wizards.
30. (Currently Amended) The machine-readable medium of claim 28 wherein **a theme of the set of themes, groups, and controls comprises one or more of** ~~includes~~ background colors, fonts, and multi-linguals.
31. (Currently Amended) The machine-readable medium of claim 28 wherein **a group of the set of themes, groups, and controls comprises the group** ~~includes~~ one or more of the controls.
32. (Currently Amended) The machine-readable medium of claim 28 wherein **a the control of the set of themes, groups, and controls comprises** ~~includes~~ one or more of a drop down box, a radio button, and a list box.
33. (Currently Amended) The machine-readable medium of claim 21 **that further provides instructions causing the set of processors to perform operations comprising: wherein the customizable UI is used to generate** ~~generating~~ a user interface for ~~the~~ **[[a]]** component product class **using the customizable UI.**
34. (Currently Amended) The machine-readable medium of claim 21 wherein the customizable UI is a subclass of the customizable product **class.**
35. (Currently Amended) The machine-readable medium of claim 21 **that further provides instructions causing the set of processors to perform operations comprising: wherein the customizable UI is used to generate**

generating a configurator user interface with HTML, Applets, and ActiveX programming languages, **wherein**
said generating uses the customizable UI.

36. (Currently Amended) The machine-readable medium of claim 21, wherein
the component product class **comprises** ~~includes~~ a static attribute, **and**
the static attribute is not associated with a parent class.

37. (Original) The machine-readable medium of claim 21 wherein the component product class, customizable class rules, and UI class are object oriented classes.

38. (Original) The machine-readable medium of claim 21 wherein the customizable product has an object oriented structure.

39. (Original) The machine-readable medium of claim 21 wherein the customizable product includes versioning.

40. (Original) The machine-readable medium of claim 21 wherein the configurator is stored in a data store.

41. (Currently Amended) An object oriented configurator comprising:
a customizable product class;
a component product **class**, **wherein**
the component product **class** is a subclass of the customizable product **class**, **and**
the component product **class** inherits a set of one or more attributes from the customizable product class; and
a customizable UI, **wherein**
the customizable UI is mapped to the customizable product **class** providing a view of the component product,

~~wherein~~ the customizable product class is configured to represent a consumer product, and
the component product class is configured to represent one or more components of the consumer product.

42. (Currently Amended) The object oriented configurator in claim 41 further comprising:

a port, ~~the port~~ comprising a set of one or more ~~of the~~ component products of the component product class.

43. (Currently Amended) The object oriented configurator in claim 42, wherein

the port comprises ~~includes~~ a cardinality, and
the cardinality ~~to~~ constrains the number of component products to add to the customizable product class.

44. (Currently Amended) The object oriented configurator in claim 43, wherein

the cardinality attribute comprises ~~includes~~ a minimum cardinality and a maximum cardinality,
the minimum cardinality ~~to~~ constrains the minimum number of component products to be added by the configurator, and
the maximum cardinality ~~to~~ constrains the maximum number of component products to be added by the configurator.

45. (Currently Amended) The object oriented configurator in claim 43, wherein

the cardinality comprises ~~includes~~ a default cardinality, and
the default cardinality defines a quantity of the component product class added by the configurator.

46. (Currently Amended) The object oriented configurator in claim 41 wherein the customizable class rule, and customizable UI are subclasses of the customizable product class.
47. (Currently Amended) The object oriented configurator in claim 41, wherein
the component product class comprises includes a static attribute, and
the static attribute is not inherited from a parent class.
48. (Original) The object oriented configurator in claim 41 wherein the attribute is of type string, number, date, and Boolean.
49. (Currently Amended) The object oriented configurator in claim 41 further comprising a second customizable product class.
50. (Currently Amended) The object oriented configurator in claim 49 wherein the second customizable product class comprises one or more component products of the component product class includes one or more of a second customizable product.
51. (Currently Amended) The object oriented configurator in claim 41 wherein a the component product of the component product class includes an expression to restrict the component product from becoming a subclass of the customizable product class.
52. (Currently Amended) The object oriented configurator in claim 41 further comprising:
a script, ~~the script~~ configured to communicate with another application.
53. (Original) The object oriented configurator in claim 41 wherein the customizable UI includes a theme, group, and control.

54. (Currently Amended) The object oriented configurator in claim 41 wherein the theme includes **one or more of** a tab, wizard, font, and color.
55. (Original) The object oriented configurator in claim 41 wherein the control includes one or more of a drop down box, a radio button, and a list box.
56. (Original) The object oriented configurator in claim 41 wherein the customizable UI map comprises HTML, JAVA applets, and ActiveX components.
57. (Original) The object oriented configurator in claim 41 wherein each component product class has an unique identifier, the unique identifier is used to locate an associative component product.
58. (Original) The object oriented configurator in claim 41 further comprising link items.
59. (Currently Amended) An apparatus comprising:
means for generating a customizable product configurator, said means for generating comprising
means for creating a customizable product class, **wherein**
the customizable product class **comprises including** a set of one or more attributes to define the customizable product class;
means for adding a component product class to the customizable product class, **wherein**
the component product class is a subclass of the customizable product class; and
means for mapping a customizable UI to the customizable product class, **wherein**
the customizable UI ~~to~~ provides **an** access structure to the configurator,
elements of the customizable UI access structure correspond to elements of the customizable product class,

~~wherein~~ the customizable product class is **configured** to represent a consumer product, and the component product class is **configured** to represent one or more components of the consumer product.

60. (Previously Presented) The apparatus of claim 59 wherein the component product class includes component product subclasses.

61. (Previously Presented) The apparatus of claim 59 wherein the component product class inherits the attributes of the customizable product class.

62. (Currently Amended) The apparatus of claim 59 **wherein said means for generating** further **comprises comprising**:

means for adding one or more component product classes to a port; and

means for adding the port to the customizable product class, **wherein** the port ~~to~~ allows the configurator to classify a group of component products.

63. (Currently Amended) The apparatus of claim 62, wherein the port **comprises includes** a cardinality attribute, **and** the cardinality attribute ~~to~~ constrains the number of component products to be added by the configurator.

64. (Currently Amended) The apparatus of claim 63, wherein the cardinality attribute **comprises includes** a minimum cardinality and a maximum cardinality, the minimum cardinality ~~to~~ constrains the minimum number of component products to be added by the configurator, **and** the maximum cardinality ~~to~~ constrains the maximum number of component products to be added by the configurator.

65. (Currently Amended) The apparatus of claim 63, wherein the cardinality attribute **comprises includes** a default cardinality, **and**

the default cardinality defines a quantity of the component product class added by the configurator.

66. (Currently Amended) The apparatus of claim 59 wherein the means for mapping **comprises: includes**

means for building the customizable UI from a set of themes, groups, and controls.

67. (Currently Amended) The apparatus of claim 66 wherein **a theme of the set of themes, groups, and controls comprises one or more of** ~~are~~ tabs and wizards.

68. (Currently Amended) The apparatus of claim 66 wherein each theme in the set of themes, groups, and controls **comprises includes** at least one of ~~a the~~ set of background colors, fonts, and multi-linguals.

69. (Currently Amended) The apparatus of claim 66 wherein **a group of the set of themes, groups, and controls comprises** ~~the group includes~~ one or more of the controls.

70. (Currently Amended) The apparatus of claim 66 wherein **a control of the set of themes, groups, and controls comprises** ~~the control includes~~ one or more of a drop down box, a radio button, and a list box.

71. (Currently Amended) The apparatus of claim 59 wherein **the means for generating further comprises:**

means for generating ~~the customizable UI is used to generate~~ a user interface for a component product class **using the customizable UI.**

72. (Currently Amended) The apparatus of claim 59 wherein the customizable UI is a subclass of the customizable product **class.**

73. (Currently Amended) The apparatus of claim 59 wherein **the means for generating further comprises:**

means for generating the customizable UI is used to generate a configurator
user interface with HTML, Applets, and ActiveX programming languages,
wherein
the means for generating uses the customizable UI.

74. (Currently Amended) The apparatus of claim 59, wherein
the component product class comprises ~~includes~~ a static attribute, and
the static attribute is not associated with a parent class.

75. (Previously Presented) The apparatus of claim 59 wherein the component
product class, customizable class rules, and UI class are object oriented classes.

76. (Previously Presented) The apparatus of claim 59 wherein the
customizable product has an object oriented structure.

77. (Previously Presented) The apparatus of claim 59 wherein the
customizable product includes versioning.

78. (Previously Presented) The apparatus of claim 59 wherein the
configurator is stored in a data store.